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SEQUENCE LISTING

<110> UNIVERSITA' DEGLI STUDI DI BOLOGNA et al.

<120> METHOD FOR SELECTIVE INHIBITION OF HUMAN N-myc GENE IN N-myc
EXPRESSING TUMORS THROUGH ANTISENSE AND ANTIGEN PEPTIDO-NUCLEIC ACIDS
(PNA)

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<141> 2004-04-29

<150> IT MI2003A000860<151> 2003-04-29

<160> 16

<170> PatentIn version 3.1

<210> 1

<211> 16

<212> DNA

<213> Artificial sequence

<220>

<223> antisense PNA that is complementary to only one sequence in 5'-UT
R region of N-myc gene (support at page 6, lines 17-20)

<400> 1
tccaccagc gcgtcc 16

<210> 2

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> mutated PNA containing the substitution of three bases (support a
t page 6, lines 23-25)

<400> 2
cccactcagc gcgccc 16

<210> 3

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> sense antigen PNA sequence which is complementary to a sequence o
f exon 2 N-myc gene (support at page 8, lines 14-19)

<400> 3
atgccgggca tgatct 16

<210> 4

<211> 16

<212> DNA

<213> Artificial Sequence

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<220>
 <223> antisense antigen PNA sequence which is complementary to a sequence of exon 2 N-myc gene (support at page 8, lines 14-19)

<400> 4
 agatcatgcc cggcat 16

<210> 5
 <211> 19
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> sense primer (exone 2, bp 2366) (support at page 14, lines 21-22)

<400> 5
 cgaccacaag gccctcagt 19

<210> 6
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> antisense primer (exone 2, bp 5095) (support at page 14, lines 22-23)

<400> 6
 tgaccacgtc gatttcttcc t 21

<210> 7
 <211> 16
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> mutated PNA sequence containing the substitution of three bases (support at page 15, lines 29-31)

<400> 7
 gtgccgagca tggctc 16

<210> 8
 <211> 7
 <212> PRT
 <213> SV40 virus

<220>
 <221> misc_feature
 <223> NLS carrier protein (support at page 7, lines 5-6)

<400> 8
 Pro Lys Lys Lys Arg Lys Val
 1 5

<210> 9
 <211> 16

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<212> PRT
<213> antennapedia

<220>
<221> misc_feature
<223> penetratin carrier protein (support at page 7, lines 7-8)

<400> 9

Arg Gln Ile Lys Ile Trp Phe Gln Asn Arg Arg Met Lys Trp Lys Lys
1 5 10 15

<210> 10
<211> 24
<212> PRT
<213> Unknown

<220>
<223> transportan carrier protein (support at page 7, lines 9-10)

<400> 10

Gly Trp Thr Leu Asn Ser Ala Gly Tyr Leu Leu Gly Lys Ile Asn Leu
1 5 10 15

Ala Ala Leu Ala Lys Lys Ile Leu
20

<210> 11
<211> 16
<212> PRT
<213> Unknown

<220>
<223> retro-inverso penetratin carrier protein (D)-sequence (support at page 7, lines 11-12)

<400> 11

Lys Lys Trp Lys Met Arg Arg Asn Gln Phe Trp Val Lys Val Gln Arg
1 5 10 15

<210> 12
<211> 13
<212> PRT
<213> HIV virus

<220>
<221> misc_feature
<223> TAT carrier protein (support at page 7, lines 13-14)

<400> 12

Gly Arg Lys Lys Arg Arg Gln Arg Arg Pro Pro Gln
1 5 10

<210> 13
<211> 11

SEQUENCE_LISTING__file_di_testo

<212> PRT
<213> HIV virus

<220>
<221> misc_feature
<223> TAT carrier protein (support at page 7, lines 15-16)

<400> 13

Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg
1 5 10

<210> 14
<211> 29
<212> PRT
<213> Unknown

<220>
<223> carrier peptide sequence (support at page 7, lines 17-20)

<400> 14

Met Ser Val Leu Thr Pro Leu Leu Leu Arg Gly Leu Thr Gly Ser Ala
1 5 10 15

Arg Arg Leu Pro Val Pro Arg Ala Lys Ile His Ser Leu
20 25

<210> 15
<211> 10
<212> PRT
<213> Unknown

<220>
<223> carrier peptide sequence (support at page 7, lines 17-19, 21)

<400> 15

Lys Phe Phe Lys Phe Phe Lys Phe Phe Lys
1 5 10

<210> 16
<211> 4
<212> PRT
<213> Unknown

<220>
<223> carrier peptide sequence (support at page 7, lines 17-19, 22)

<400> 16

Lys Lys Lys Lys
1